

ABSTRACT

A multi-axial bone fixation implant includes an elongated member, one or more bone anchor assemblies, and stabilizer members which are fitted within the elongated member. A bone bolt having cancellous threads on one end and machine threads at the opposing end and an enlarged portion between these sections is also provided. The bone bolt is anchored into a bone via the cancellous thread end. The machine threaded end passes through an opening of the elongated member and the stabilizer, and is engaged by a coupled washer and nut. The washer includes an undercut within its oblong aperture, and the nut includes a projecting sleeve. The sleeve is inserted into the washer aperture and expanded, so that the undercut retains the sleeve within the washer without impairing the rotatability or translatability of the nut and washer with respect to each other. When locked by the nut and washer atop the elongated member, the enlarged portion of the bolt is forced against an inside wall of the stabilizer, which is in turn locked against the elongated member. Accordingly, the elongated member is fixed with respect to the bone anchor at one of an infinite number of multi-axial angles.

DNK-2000-013-PA:CAS:79260

BEST AVAILABLE COPY